Table 1-1. Final Cleanup Levels

Old American Zinc Superfund Site Surrounding Properties

Contaminant of Concern	Residential (mg/kg)	Non-Residential (mg/kg)
Arsenic	32	239
Cadmium	37	809
Lead	400	826
Zinc	6,400	306,600

1.4 Remedial Design Activities

RD activities to support implementation of the selected remedy have been outlined in EPA's Statement of Work dated February 17, 2017, attached to the Initial Work Assignment Form, dated February 17, 2017. The following activities were included in the surrounding properties' design:

- Project Management
- Community Involvement
- Field Investigation/Data Acquisition
- Sample Analysis
- Analytical Support and Data Validation
- Data Evaluation
- Prefinal/Final Design
- Technical and Post-RD Support

Project management, community involvement, and post-RD support are efforts that are required to manage the work and support EPA in related activities.

Properties and alleyways included in this design are based on results from 2002 and 2003 sampling performed by ENTACT (ENTACT 2003), predesign investigations completed by ARCADIS (ARCADIS 2016), and 2017 predesign sampling conducted by CH2M (CH2M 2018a). Based on the analytical results from these sampling efforts, over 100 properties and 15 alleyways require remediation. This design includes properties and 9 alleyways that require remediation. The remaining properties are being addressed by the removal action, or will be included in an addendum.

Appendix A contains the design drawings, which are based on field measurements. Surveys were not performed. Drawings for properties sampled in 2017 that exceeded cleanup criteria were drafted from field measurements collected during property-sketching events. Properties that were sampled previously by ENTACT were measured and sketched during field reconnaissance if CH2M was granted access prior to or during the sketching event. For properties previously sampled by ENTACT where CH2M was not granted access, the design drawings were developed based on ENTACT's sampling sketches and publicly available aerial imagery. The property drawings include the following features: structures (such as a house, garage, or shed), property corners and boundaries, landscape features (trees and shrubs), driveways, sidewalks, patios/decks, gravel/concrete/asphalt surfaces, and streets.

Appendix B contains detailed design specifications. Appendix C contains the construction quality assurance plan (CQAP). Appendix D contains the engineer's estimate of construction cost for remediation. Appendix E includes agency consulatation documentation, and Appendix F summarizes CH2M and ENTACT sampling data.

AX1011180212MKE 1-3

Summary of Comments on OAZ_FINAL_BODR sd.pdf

Page: 9

Number: 1 Author: Shdesai Subject: Highlight Date: 11/14/2018 3:51:12 PM

update text throughout to 68 properties - one property was completed by removal

- An XRF correlation study will be performed for site soils and XRF instrument to be used during the RA. EPA will select XRF screening criteria based on the results of the correlation study.
- Garden and landscaped areas will be screened with an XRF prior to excavation to prevent removal of
 plants and shrubs as much as possible. If the XRF screening results indicate that the garden and/or
 landscape areas exceed cleanup criteria, it will be excavated to the same depth as the yard area
 where it is located, pending XRF screening results.
- The excavation depths were determined based upon sampling results from the TCRA investigation, RI, and predesign sampling activities. Excavation will be performed to the maximum sample depth with one or more contaminant of concern (COC) exceedance(s) for each yard area.
- Excavation will occur to a maximum depth of 30 inches. The maximum design excavation depth is 24 inches. Yard areas that are designed to an excavation depth of 24 inches (or 18 inches for TCRA investigation properties) will be screened with an XRF at the bottom of the excavation. Pending the XRF screening results, additional excavation may be completed to a maximum depth of 30 inches. A final XRF screening will be performed at 30 inches to determine placement of demarcation fabric.
 - Excavation beneath immovable items (decks, sidewalks, small sheds, aboveground pools, and gravel, asphalt, or concrete driveways, etc.) will not be performed.
 - Gravel driveways that provide an effective barrier over soil and gravel easements will not be excavated. Gravel alleyways will be excavated as shown in the drawings. Asphalt alleyways will not be remediated.
- Trees less than 4 inches in diameter at breast height (4.5 feet above ground surface) will be removed and placed.
- Trees greater than 4 inches in diameter at breast height will not be removed. Manual excavation, or other method(s) approved by the owner's representative, will be performed underneath the drip zone of trees to remain, to a maximum of 8 feet from the tree trunk to minimize root damage. The average excavation depth underneath the drip zones was assumed to be 4 inches for costestimating purposes, but excavation will be performed to the full excavation depth (identified in the drawings), if possible.
- Water that accumulates in lined excavations (i.e., has not contacted contaminated soil) will be pumped onto the property owner's grass or through a geotextile material and discharged to the storm sewer system.
- Accumulated water in unlined excavations and decontamination liquids will be contained and stored at the FA for use for dust suppression at the FA in areas that have not yet been remediated.
- Excavated soil from the surrounding properties and alleyways will be transported to the FA for incorporation into a consolidation area during the FA RA. This design assumes that the FA RA and surrounding properties RA will be performed concurrently with a start date in spring 2019. In the event that the RAs are not performed concurrently, or if work stops for an extended period of time (as determined by the owner's representative), the soil staging pile will be seeded to provide stabilization and prevent transport of contaminated dust particles back into the surrounding area. The cost estimate includes provisions for a single seeding of the soil staging pile. It is assumed that a satisfactory stand will be established after a 6-week maintenance period. The soil staging pile will be separate from the yard waste stockpile.
 - During the RA, the contractor will be responsible for managing the soil staging pile at the FA to prevent transport of contaminated dust particles back into the surrounding area.
- Gravel alleyways will be restored by backfilling the excavated area(s) with general fill to a depth of 6 inches below ground surface (bgs), and then placing CA-6 material to final grade.

3-2 AX1011180212MKE

Number: 1		Subject: Highlight Date: 11/14/2018 3:16:26 PM
Wouldn't this re	quire a QAPP for ob	taining the samples for the correlation study?
Number: 2	Author: Shdesai	Subject: Highlight Date: 11/14/2018 3:22:50 PM
This should say	if necessary. Trees sh	nouldn't be replaced unless needed.

• Recommendation for USACE Jurisdictional Determination of onsite wetlands regulated under the Clean Water Act (CWA) Section 404.

3.2.1.4 Staging Area, Borrow Source, and Disposal Source Identification

The contractor will identify potential borrow sources of general backfill, topsoil, select topsoil for garden areas, gravel, and rock in its proposal and confirm the intended facility(ies) within 5 days of Notice of Award. Prior to receiving the materials, the contractor will collect compliance samples of general backfill, topsoil, and select topsoil materials with the owner's representative. The owner's representative will submit the samples to the analytical and geotechnical laboratory contractors for testing to verify that the material meets specifications and are appropriate for use. Continued compliance samples will be collected and submitted for laboratory analysis at a frequency of 1 per 1,000 cubic yards throughout the RA to verify continue compliance of the material with project specifications. Gravel and rock will not be submitted for analytical or gradation analysis. The contractor will submit a materials sheet from the borrow source indicating that the material meets the specifications. No additional compliance submittals are required for gravel, unless the borrow source changes.

With EPA's approval, the staging area for field trailer(s), equipment, and borrow source material stockpiles will be an approximately 2.5-acre area located on the northeast portion of the FA, as shown in Drawing G-2 (Appendix A). The actual location of the staging area will be determined during the RA. The FA is secured with fencing, is in close proximity to the properties and alleyways requiring remediation, and has adequate area to stage excavated soil from the surrounding properties and alleyways, stockpile borrow materials, store equipment, house temporary field offices/trailers, and equipment decontamination facilities. Use of the staging area for stockpiling borrow materials provides the opportunity to use larger trucks to import borrow materials and for transportation and disposal, thereby reducing the overall transportation impacts. Silt fencing and appropriate erosion control measures will be placed around stockpiled materials and maintained by the contractor. An access area will be maintained to allow dump trucks and equipment to access the stockpiled materials within the area of silt fencing.

Depending on the sequencing of the FA RA and surrounding properties RA, excavated soils from the surrounding properties will be either staged near the existing slag stockpile area located in the northwest portion of the FA, or placed directly in the consolidation area. If the FA RA and surrounding properties RA are performed concurrently, the contractor will coordinate with the FA contractor before placing excavated material from the surrounding properties within the consolidation area. The consolidation area will consist of excavated soils from the surrounding properties and onsite residue material (building slabs and slag and smelter materials). The FA contractor will construct a perimeter berm around the consolidation area to provide containment and aid with the management of contact water and runoff generated during the filling of the cell. The FA contractor will place a 24-inch suitable soil cover over the filled consolidation area, followed by a 12-inch vegetative soil layer. Inspections and maintenance of the consolidation area will be performed by others. The consolidation area is currently designed to accommodate over 900,000 cubic yards of material. However, the final cell design may be adjusted to accommodate changes in consolidated material quantities. The consolidation area design, including sloping, compaction, stormwater management around the consolidation area, and restoration requirements, is outlined in the Final Basis of Design Report, Old American Zinc Plant Superfund Site Facility Area Remedial Design (CH2M 2018b).

For the purposes of this design, it is assumed that excavated material from the surrounding properties will be placed directly into the consolidation area (or stockpiled temporarily prior to placement into the consolidation area). However, in the event that the FA RA and surrounding properties RA are not performed concurrently, the excavated material will be staged at the FA, and moved to the consolidation area at a later date by the FA RA contractor. The excavated soil staging pile will be constructed and maintained as described in Section 3.6.

AX1011180212MKE 3-5

Number: 1 Author: Shdesai Subject: Highlight Date: 11/14/2018 4:43:27 PM

The Northeast corner appears to be on individual residential properties which EPA does not have access to. It is outside of the fence line making it easy for materials and equipment to be stolen. The field trailers and equipment should be stored on the parking lot around the main building (outlined in blue) however, the figure is missing the road from the first gate just north of the building in it's outline. There is no indication on Drawing G-2 where borrow materials are to be placed. The drawing only indicates locations of waste from clearing and grubbing. These locations do not correspond with that of BODR for the Facility Area

work areas during working hours at the site. The engineer, owner's representative, and EPA will not be held responsible for theft or damage to subcontractor equipment, materials, facilities, or field offices.

Since the FA is fenced, it is assumed that additional site security will not be performed. Therefore, there are no associated costs for this assumption.

3.4 Site Preparation

Site preparation activities specific to the surrounding properties RA include locating underground utilities, installing erosion and sediment control measures at stormwater inlets and other areas, documenting current conditions, and clearing and grubbing. Appendix D summarizes estimated costs associated with this work.

3.4.1 Design Assumptions

3.4.1.1 Excavation Limits

The excavation limits are shown in the property drawings (Appendix A), which were developed using field sketches and sampling information, aerial photography, and available parcel information. Surveys were not performed as part of the design activities. Property boundaries can be located using survey markers and property dimensions during the RA. The excavation limits include grassed areas, gardens, landscape beds, and other areas of exposed ground. Raised-bed gardens will be evaluated during the RA to determine if excavation is warranted based on bed construction and soil depth. Walkways made of pavers, bricks, or similar construction methods may be removed and reinstalled after the work is completed, but will be determined on a property-specific basis depending on the integrity, size, accessibility, level of effort, use, and other factors. Existing concrete sidewalks, gravel driveways, and gravel easements will not be removed unless in disrepair and the removal allows work to be performed more efficiently, on a case-by-case basis and as approved by EPA.

Data from the 2017 soil sampling event (CH2M 2018a), predesign investigation (ARCADIS 2016), and TCRA removal action report (ENTACT 2003) were screened against final cleanup levels to determine excavation extents. RI properties where CH2M was not granted access for field sketching are not included in this phase of the design. These properties will be designed using aerial imagery and included in an addendum.

3.4.1.2 Preconstruction Property Visits

The owner's representative and contractor will perform two preconstruction property visits with the property owner. The initial preconstruction meeting will document existing conditions of the property and determine the means and methods to implement the work. The second preconstruction meeting will document property owner approval of the work to be performed at the property.

Initial Preconstruction Meeting

Approximately 2 weeks prior to the start of work at a property, an initial preconstruction meeting will be held. The initial preconstruction meeting will consist of completing a Preconstruction Property Assessment Checklist with the property owner to document the existing conditions and capture digital photographs and/or video recording. A copy of the Preconstruction Property Assessment Checklist, along with a copy of the property-specific drawing, will be provided to each property owner before remediation begins. For vegetation clearing between April 1 and September 10, the Migratory Bird assessment will be performed and the Migratory Bird Field Assessment Checklist completed and submitted.

The owner's representative will prepare a site visit folder prior to meeting with the property owners to plan property-specific RAs. The folder will contain a base drawing of the property (Appendix A) and a signed site access agreement.

AX1011180212MKE 3-7

Number: 1 Author: Shdesai Subject: Highlight Date: 11/15/2018 9:37:22 AM Update to new dates based on USFWS consultation

3.4.1.4 Survey No. 1—Preconstruction Survey

Up to three surveys may be performed at each property:

- Preconstruction survey to document existing surface elevation.
- Post-excavation survey to document excavation depths.
- Post-backfilling survey to document the restored elevations.

Surveys will be performed if determined necessary by the owner's representative. The surveying method will be determined by the owner's representative.

3.4.1.5 Property Protection

Before any soil excavation can begin, two points of continuous access for property owners and tenants will be established and maintained when possible, with one point of continuous access at all times. If it is necessary to restrict access for extended periods, the work will be done at a time when the property owner and tenant will not be present at the property. Property owner and tenant access to the property will not be restricted between the hours of 6:00 p.m. and 7:00 a.m.

Appropriate signage and protective measures will be placed where required for pedestrian traffic on sidewalks or vehicular traffic on streets in accordance with the transportation and disposal plan developed by the contractor. Temporary construction (orange safety) fences will be maintained around active excavation areas to demarcate zones that should not be entered by members of the public.

3.4.1.6 Clearing, Grubbing, and Tree, Shrub, and Fence Removal

Clearing and grubbing will be performed, where necessary, at properties where excavation activities will occur. Vegetation will be removed flush with ground surface. Existing stumps will not be removed or ground up as part of the clearing and grubbing activities. During excavation activities, soil will be removed around the root mass as much as possible if the maximum excavation depth cannot be reached.

During the RA, trees will be evaluated on a case-by-case basis. It is assumed that trees less than 4 inches in diameter at breast height will be themoved. Trees larger than 4 inches in diameter will remain in-place unless otherwise directed by the owner or owner's representative due to safety concerns, access issues, property owner requests, or other property-specific factor. Trees for removal may be modified during preconstruction activities; however, trees and shrubs will not be removed between pril 1 and September 10 to the extent practicable. Trees and shrubs that are removed within this timeframe will follow the protocols described in Section 4.1.2 and the specifications, which includes conducting a Migratory Bird inspection and completing the Migratory Bird Checklist 24 hours prior to vegetation clearing.

Aboveground plant materials removed as part of clearing activities will be stockpiled at the FA. If mature tree removal is required, the contractor may elect to take tree trunks containing no visible soil to a local mill for lumber. Disposal of belowground root mass associated with tree, shrub, and vegetation will be managed as contaminated material in accordance with the contractor's transportation and disposal plan, and will be transported to the FA, where it will be ground up and stockpiled with the plant materials at the FA for use at the FA, or to compost. The chipped waste can only be used on the FA.

It is expected that the property owner will remove personal items from the work areas prior to the start of work. Debris located within the excavation areas will be removed with approval from the property owner. Examples of debris may consist of yard waste, wood, concrete pieces, or other materials. Personal items that are not removed by the property owner will be inventoried and temporarily stored at another location within the property or in a secure place at the staging area. Items removed from the property (either for storage or disposal) will be identified in an inventory list included in the property owner preconstruction package.

AX1011180212MKE 3-9

Number: 1	Author: Shdesai	Subject: Highlight	Date: 11/15/2018 9:50:36 AM
If necessary shou	ıld be added		
Number: 2	Author: Shdesai	Subject: Highlight	Date: 11/15/2018 9:51:03 AM
update dates bas	sed on USFWS		

Table 3-1. Excavation Depths and Volume of Excavated Material Old American Zinc Superfund Site Surrounding Properties

Property Address	Parcel ID(s)	Section A (FY1/Q1/NE)	Section B/Back (BY1/Q2/NW)	Section C (FY2/Q3/SE)	Section D (BY2/Q4/SW)	Section E/	Middle	Side	Design Volume of Excavated Material (cubic yards)	XRF Bottom of Excavation
Troperty Address	02-08.0-203-019, 02-08.0-203-020, 02-	(1.12/ 0(2) 112/	(2.12) Q2)				muuic	5.00		LACUVUCION
NON-	08.0-203-030			6	6				67	
NON-	02-08.0-204-075							18	55	
	02-08.0-204-069,02-08.0-204-070,02-									
NON-	08.0-204-071, 02-08.0-204-068				12				131	
	•									
NON	02-08.0-204-057,02-08.0-204-058, 02-	6	6						41	
NON-	08.0-204-059									
NON-	02-08.0-205-072		6			18		18	110	
NON-	02-08.0-205-046						12		43	
NON-	02-08.0-206-071, 02-08.0-206-070,02- 08.0-206-068, 02-08.0-206-069		6						56	
NON-	02-08.0-206-083		6						75	
NON-	02-08.0-207-043		18						59	BY
NON-	02-08.0-206-052		6			12			40	
NON-	02-04.0-301-005		24						104	Back
NON-	02-04.0-301-017		18						32	
NON-	02-04.0-302-042		12						101	
NON-	02-04.0-303-054				6				25	
NON-	02-09.0-106-091		18		12				181	
NON-	02-04.0-305-074		18						73	BY
NON	02-09.0-106-056		6						28	
NON-	02-04.0-312-016		12						58	
NON-	02-04.0-305-040		12						51	
NON	02-04.0-313-029		12						229	
NON-	02-04.0-313-013		6						58	
NON- PESPONSI	02-04.0-313-014, 02-04.0-313-015		6						29	
NON CIVO	02-04.0-307-056		12						166	
NON	02-09.0-108-069	18	6						1528	FY1
NON-	02-09.0-108-046 02-09.0-108-047				18				81	
NON-	02-04.0-313-065, 02-04.0-313-066		6						152	
NON-	02-04.0-314-086	6							55	
NON-	02-04.0-308-039, 02-04.0-308-040	6	6						67	
NON-	02-04.0-307-045, 02-04.0-307-046	18	12						232	FY
NON-	02-04.0-308-045		12	-					105	
NON	02-04.0-314-066, 02-04.0-314-067		18						132	BY
NON-	02-09.0-109-045	6	6						107	
NON-	02-09.0-110-012	6			12				371	
NON-	02-09.0-110-011	12	6	6	6				435	
NON-	02-04.0-314-064, 02-04.0-314-065		18						132	BY
	02-04.0-314-034, 02-04.0-314-035, 02-									
NON-	04.0-314-036, 02-04.0-314-037, 02-			12					141	
	04.0-314-038									

Number: 1 Author: Shdesai Subject: Highlight Date: 11/16/2018 10:18:53 AM This property was completed by removal and should be removed.

owner and resident will not be present at the property. Access to the property will not be restricted between the hours of 6:00 p.m. and 7:00 a.m.

4.1.2 Natural Resources

4.1.2.1 Protected Species

According to the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation system, there is a potential for protected species to be present at the site. The site is also within the Mississippi flyway for migratory birds. To minimize impacts to these species and to comply with conservation as outlined in the specifications, tree removal trees and shrubs will not be removed between pril 1 and September 10 to the extent practicable. If tree removal must occur during this timeframe, inspections for active migratory birds will be performed, and measures will be taken to minimize impacts. An effects analysis consultation request was submitted to USFWS (Appendix E). The project is not expected to have a significant adverse effect on any protected species.

4.1.2.2 Wetlands

The National Wetlands Inventory Mapper indicates that there is a freshwaters water wetland (PEM1C) mapped in the OAZ south section of the project adjacent to, or within, a remediation area. The project specifications require that a wetland delineation be performed to confirm the presence and extent of wetlands prior to ground disturbance. Small pocket wetlands may be identified within the project area, including emergent freshwater wetlands to the south of the OAZ and in the northern end of the FA.

The delineation will follow the protocols and methods in the *USACE Wetlands Delineation Manual*, Wetlands Research Program Technical Report Y-87-1 (1987), the *USACE Jurisdictional Determination Form Instructional Guidebook* (May 30, 2007) (JD Guidebook), and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0)* (2010), including any USACE St. Louis District requirement. Location of wetlands, waters, and other regulated areas are to be recorded using a GPS unit with sub-meter accuracy. Data and representative photographs of each environmental resource will be recorded. Data collected will be used to prepare a recommendation for a USACE Jurisdictional Determination of whether the wetlands are regulated under the CWA Section 404. If regulated wetlands will be disturbed as part of the project, the work with comply with the substantive requirements of Nationwide Permit No. 38 Cleanup of Hazardous and Toxic Waste.

4.1.3 Cultural Resources

Portions of several remediation properties have been previously surveyed for archaeological resources. None of these properties contain archaeological resources. However, properties north and east of the facility are located within the boundaries for Cahokia Mounds, a National Register of Historic Places- and UNESCO World Heritage-listed site. Due to the probability of additional archaeological resources within the Surrounding Area, an nanticipated Discovery Plan (UDP) was developed to establish methodology for addressing previously unidentified archaeologial deposits during excavation. The Illinois State Historic Preservation Agency has reviewed the UDP and provided comments, which are incorporated in the UDP. Appendix E contains a UDP, a cultural resources literature veiw, including documentation from the Illinois Department of Natural Resources Historic Preservation Division's website (2017), National Register of Historic Places, and the UNESCO World Heritage database.

4.1.4 Stormwater Management

Contractors will be required to implement procedures during construction activities to prevent or reduce pollutants in stormwater discharges, consistent with NPDES Permit No. ILR10. As a matter of coordination, St. Clair County requirements will also be considered. Stormwater pollution prevention features and erosion control features will be described in the SWPPP designed to reduce stormwater

4-2 AX1011180212MKE

Number: 1	Author: Shdesai	Subject: Highlight	Date: 11/16/2018 10:34:12 AM	
Revise				
Number: 2	Author: Shdesai	Subject: Highlight	Date: 11/16/2018 10:38:28 AM	
INGILIDEL. Z	Addition. Stracsar	Subject. Highinghic	2 dec. 1.7.10,2010 10.00.207	

Drawings

Appendix A contains drawings of each individual property. Table 7-1 lists the drawings.

Table 7-1. List of Drawings

Old American Zinc Superfund Site Surrounding Properties

Drawing Number	Drawing Name
G-1	Legend
G-2	Proposed Stockpile and Staging Areas
C-1	NON-
C-2	NON-
C-3	NON-
C-4	NON-
C-5	NON-
C-6	NON-
C-7	NON-
C-8	NON-RESPONSIVE
C-9	NON-
110	NON-
C-11	NON-
C-12	NON-
C-13	NON-
C-14	NON-
C-15	NON-
C-16	NON-
C-17	NON-RESPONSIVE
C-18	NON-
C-19	NON-
C-20	NON-RESPONSIVE
C-21	NON-RESPONSIVE
C-22	NON-RESPONSIVE
C-23	NON-RESPONSIVE
C-24	NON-RESPONSIVE
C-25	NON-
C-26	NON-
C-27	NON-

AX1011180212MKE 7-1

Number: 1 Author: Shdesai Subject: Highlight Date: 11/16/2018 10:40:51 AM

Completed by removal - suggest just removing location and stating completed in 2018 TCRA so all Designs do not have to be renumbered

Table 7-1. List of Drawings *Old American Zinc Superfund Site Surrounding Properties*

Drawing Number	Drawing Name
C-61	NON-
163	NON-
C-63	NON-
C-64	NON-
C-65	NON-
C-66	NON-
C-67	NON-
C-68	NON-RESPONSIVE
C-69	NON-RESPONSIVE
C-70	Alley 01
C-71	Alley 03
C-72	Alley 06
C-73	Alley 07
C-74	Alley 08
C-75	Alley 10
C-76	Alley 15
C-77	Alley 16
C-78	Alley AT1-S

AX1011180212MKE 7-3

Number: 1 Should be C-62

Author: Shdesai Subject: Highlight Date: 11/16/2018 10:41:47 AM

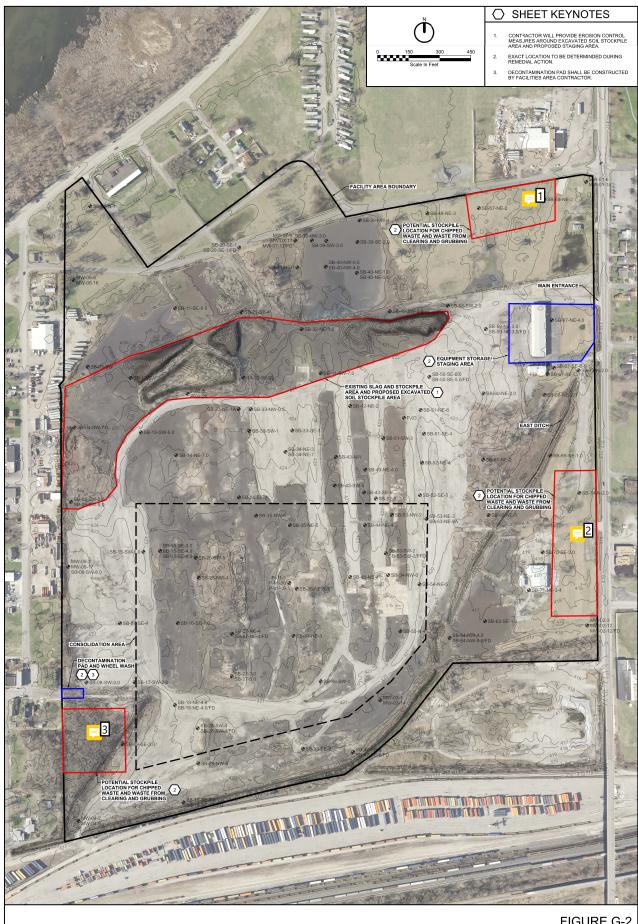
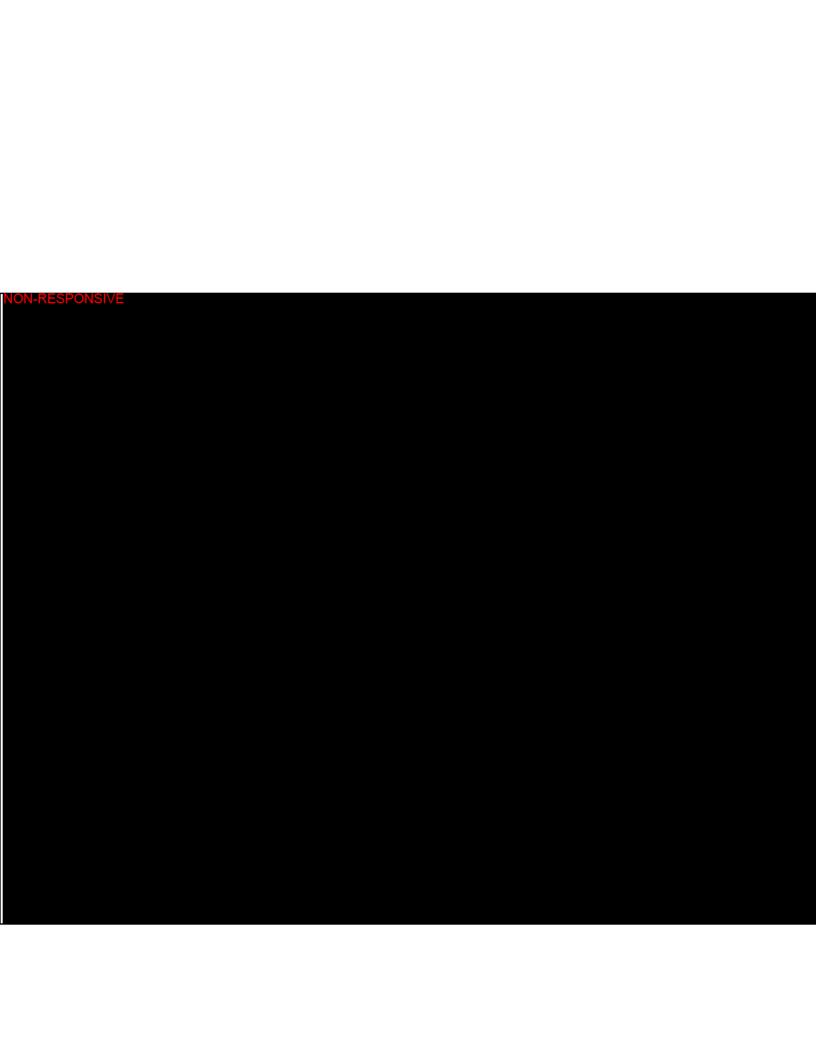


FIGURE G-2 PROPOSED STOCKPILE AND STAGING AREAS
OLD AMERICAN ZINC SUPERFUND SITE
PREFINAL DESIGN SUBMITTAL MAY 2018
REVISION - 0

Number: 1		Subject: Sticky Note	Date: 11/14/2018 4:37:12 PM		
This area is out	side the fence line ar	nd EPA does not have all a	access to parcels		
Number: 2		Subject: Sticky Note	Date: 11/14/2018 4:38:23 PM		
This area is inac	ccessible to vehicular	traffic from the Facility A	rea and can only be reached via the road if the gate is opened.		
Number: 3	Author: Shdesai	Subject: Sticky Note	Date: 11/14/2018 4:39:12 PM		
This area would	This area would need to be cleared and grubbed before any waste from clearing and grubbing could be placed				



Number: 1 Author: Shdesai Subject: Highlight Date: 11/16/2018 10:42:52 AM

Remove - Suggest blank place holder sheet stating C-10 completed in 2018 TCRA or something similar

The following existing	drainage problems we	ere identified on the property p	prior to work.	
Location	Description	1		
Location	Description			
Location	Description			
Location	Description	1		
Specific Requests from	m the Property Owner	:		
Contractor wil shrubs and pe remedial actio owner(s) to re punch list iten	l perform watering for erennials, and recover ons. Following this wat view acceptability of c	a period of weeks for estably of trees where shallow roots fering period, a post-construct completed work to document s	nrubs, perennials, and lod as follow lishment of new grass, replacement may have been disturbed during ion meeting will be held with the proubstantial-completion and to developerty owner is responsible for the	trees
Property Owner Agre	eement Signatures:			
Property Owner Signa	ture	Print Name	Date	_
Contractor Signature		Print Name	Date	_
Owner's Representation	ve Signature	Print Name	Date	

Number: 1			Date: 11/15/2018 3:28:16 PM
Revise to grass of	or hydroseeded area	as well as maintena	nance time frame
Number: 2	Author: Shdesai	Subject: Highlight	Date: 11/15/2018 3:28:33 PM
Revise according	gly		

Property Substantial Completion Form

Address:					
Construction Start Date: Construction and Restoration Completion Date:					
Subcontractor Has Excavated	and Restored the Following Areas:				
	_ft				
– Depth	_ft				
Description of Other Yard Rem	ediated				
	ir to trees/plants that were not removed from yards?	☐Yes ☐No			
	Description/Damage				
•					
	anted removed from yards and disposed still present?	□ Yes □ No			
Location	_Description				
3. Were the items move	d prior to construction returned to the proper location?	□ Yes □ No			
Location	_Description				
Agreed To Resolution					
4. Were unknown buried	d items uncovered during the excavation?	□ Yes □ No			
Location	_Description				
What Was Done:					
5. Have grasses, trees, s ☐Yes ☐No	shrubs, perennials, wetlands or special habitat been replaced	as approved?			
List Any Missing Plants:					
	_Description				
Location	_Description				
Location	_Description				
Agreed To Resolution					
List Any Missing Wetlands Res	toration Aspects (if applicable:				
Location	_Description				
Location	_Description				
6. Does the resident rep	ort damage to the property from construction?	□ Yes □ No			
List all damage, including any a	already repaired:				
Location	_Description				
Was the damage shown on the	Preconstruction Photographs or Video?	□ Yes □ No			
Relevant Documentation:					
7. Are there other unres	olved issues?	□ Yes □ No			
List Any Unresolved Issues					
Location	Description				
Agreed To Resolution					
8. Date for the completic	on of the <mark>1-week</mark> landscape watering:	_			

Number: 1 Auth Should this be longer?

Author: Shdesai Subject: Highlight Date: 11/16/2018 9:22:32 AM

SURROUNDING PROPERTIES REMEDIAL DESIGN OLD AMERICAN ZINC SUPERFUND SITE

9.	Were	there changes from the agreed preconstruction	plan for the property?	☐Yes ☐No
	9a.	If yes, were the changes at the direction of the pr	operty owner?	□ Yes □ No
	9b.	Provide a description of the changes (e.g., final g	rade modified):	
Locat	tion	Description		
initiat	ed desig	and their Representatives make no warranties or rep in changes. Property owner also assumes all liability es of the work.		
10.	Date	for resolution of all outstanding issues:		
Aare	ement w	vith the Property Owner That Construction Is Sul	stantially Complete:	
Prope above includ	erties, Re e. The pi	and restoration activities associated with the Old Amemedial Action have been completed as agreed during roperty owner hereby assumes responsibility for mains, shrubs, perennials, and today.	ng the preconstruction mee	tings and as described
Date		Property Owner	Print Name	
Date		Contractor	Print Name	
Date		Owner's Representative	Print Name	

Author: Shdesai

Subject: Highlight Date: 11/15/2018 3:28:48 PM

Number: 1
Revise accordingly

SURROUNDING PROPERTIES REMEDIAL DESIGN OLD AMERICAN ZINC PLANT SUPERFUND SITE

D. Stormwater, Erosion, Sediment, and Flood Control:

- Provide, inspect, maintain, and operate temporary facilities to control erosion and sediment releases, and to protect the Work and existing facilities from flooding during construction period.
- 2. To reduce erosion, and control stormwater run-on and runoff during construction activities, the following structural and nonstructural best management practices will be included in the Stormwater Pollution Prevention Plan and be implemented:
 - a. Minimize the area of bare soil exposed at one time (that is, phased excavation).
 - b. Minimize the amount of time an excavation is open.
 - c. Stabilizing cut-and-fill slopes.
 - d. Perimeter controls (such as drainage diversions).
 - e. Sediment basins and traps.
 - f. Silt fences at excavations.
 - g. Site restoration (for example, regrading, placing gravel, or repaying with asphalt or concrete).
- Prepare site only after adequate erosion and sediment controls are in place as discussed during the pre-construction meeting. Contractor will identify anticipated duration excavation will remain open and what will be required.

E. Dust Control:

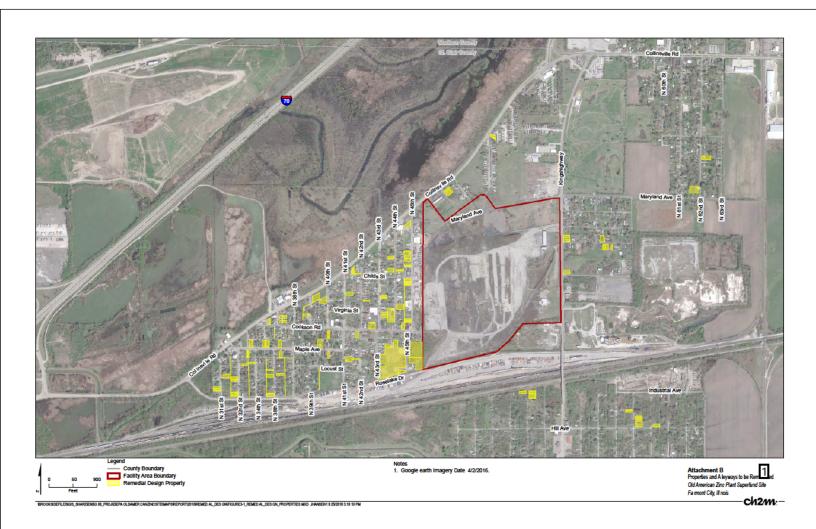
- The Contractor will comply with the fugitive dust control program and meet the applicable requirements of Air Pollution Control Rules, Illinois Administrative Code Title 35, Subtitle B, Chapter 1, Part 212 Visible and Particulate Matter Emissions, Subpart K, Parts 212.
- The Contractor will be responsible for controlling the dust and airborne dirt generated by construction activities. Water or other suppression means will be used as needed to control dust.
- 3. The Contractor will perform street cleaning daily from the time earthwork is initiated until backfilling of excavations is complete. Additional street cleaning will be performed by the Contractor if directed by the Owner's Representative. Final street cleaning will be conducted prior to the removal of the temporary erosion control measures, such as inlet protection. Street cleaning will be performed with equipment that will capture debris after sweeping, using either mechanical collection methods or vacuum, to minimize fugitive dust emissions.

Author: Shdesai

Subject: Highlight Date: 11/15/2018 3:29:16 PM

Number: 1 Author: 9 replace with hydroseeding

NON-RESPONSIVE



Number: 1

Author: rvaugha3 Subject: Text Box Date: 10/2/2018 12:02:16 PM -05'00'

Attachment B

NON-RESPONSIVE